NEBRASKA BROADBAND WORKING GROUP MEETING LINCOLN LANCASTER COUNTY HEALTH DEPARTMENT 3140 N STREET MAY 19, 2016 1:00 P.M.

Minutes

VOTING MEMBERS PRESENT

Tom Casady-Police Chiefs Association of Nebraska
Gene Hand-Nebraska Public Service Commission
Lynn Marshall- Nebraska Association of Emergency Managers
Mathew May- Winnebago Tribe of Nebraska
Neil Miller-Sheriff's Association of Nebraska
Tom Nutt-Nebraska Association of County Officials
Julie Righter-Dove- APCO/ NENA
Brian Daake – Nebraska Municipal Fire Chiefs Association
Lt. Jason Dean – Nebraska State Patrol

NON-VOTING MEMBERS PRESENT

Ed Toner- Chief Information Officer State of Nebraska Bob Wilhelm- OCIO

MEMBERS ABSENT

Bill Lundy-Nebraska State Volunteer Firefighters Association
Jon Borton- Nebraska Hospital Association
Larry Voegele- Ponca Tribe of Nebraska
Roger Foster- League of Neb. Municipalities
Russ, Stancyzk-NSP/ State Law Enforcement-Alternate Lt. Jason Dean present
Stuart Redwing- Santee Sioux Tribe of Nebraska
David Webb — NPPD
Jim Weeda — Nebraska Rural Electric Association (NREA)
Scott Cordes — Nebraska Municipal Fire Chiefs Association-Alternate Brian Daake present

MEETING CALL TO ORDER/ ROLL CALL

Tom Casady (Chair) called the meeting to order at 1:00 P.M. After a roll call a quorum of voting members were present. The meeting was posted to the Nebraska Public Safety Broadband Network Planning Project Page and on the Nebraska Public Meeting Calendar.

ACKNOWLEDGE OPEN MEETING ACT AVAILABLE FOR REVIEW

Tom Casady advised the Open Meeting Act was available on the wall in the back of the room.

OPENING COMMENTS BY THE CHAIR- TOM CASADY

Director Casady welcomed everyone to the meeting and advised attendees that the meeting was being audio recorded. He also reminded the group that at our May 2015 meeting we became aware that Omaha Police Officer Kerrie Orozco had been killed in the line of duty. He asked all to observe a moment

of silence in honor of Officer Orozco and other Nebraska Law Enforcement Officers who have died in the line of duty.

INTRODUCTION OF AUDIENCE MEMBERS- TOM CASADY

Director Casady invited the public attendees in the audience to share information about who they were and their agencies. **The public included:**

Rosalia Solis- OCIO, Troy Harris- Nebraska Emergency Management Agency, Bob Nord- Director OPS: Dotcom, Al Krause-NET, Bob Huber NETV, Destry Jaeger – SGT LPD, Jason Stille – Captain LPD, Cullen Robbins- Analyst: Nebraska Public Service Commission, Stan Shearer- Mobile Data Coordinator: Omaha Fire, Lon Renner- NPPD Engineer, Jim Davidsaver – Director of Lancaster County Emergency Management Agency, Dale Gibbs Director of Rural Health CHI Health, Kearney, Pete Crawford – City of Lincoln radio shop, Stan Shearer – Omaha Fire MDC coordinator, Kevin Briggs – Division Supervisor NDOR, Ben Leseberg – EMS Specialist DHHS,

ACCEPTANCE OF THE MINUTES FROM THE FEBRUARY 18, 2016 MEETING- TOM CASADY

Neil Miller motioned to approve the February 18, 2016 minutes as presented. Gene Hand seconded. Roll Call vote: Results: Yes- 9, No- 0, Abstained- 0. Motion Passed.

PRESENTATION BY FIRSTNET STAFFERS TIM PIERCE, DOUG HARDER AND DREW DELANEY

Tim Pierce is Nebraska's FirstNet Region VII Regional Consultation lead. He introduced himself and talked about his experience with FirstNet as a Wisconson State SWIC and his experience with Emergency Management. He talked about where FirstNet is at and how they used the information the state provided during the data collection phase. He said there were two over arching points for today. One is understanding what information FirstNet needs to provide to the Governor so he is in the best position to make a decision on opting in or out of the FirstNet plan. The second, outside of that decision, is agency adoption for when FirstNet is deployed and live and it is a choice of yours to subscribe. What information do you need to make that decision if you want to subscribe to FirstNet.

He stressed that this was a network that was pushed for by the public safety community. FirstNet in simple terms is looking to be public safety's cellular provider that is dedicated to and solely serves public safety. Mr. Pierce talked about the States Initial Consultation meeting held in 2015 in Kearney and the Data Collection drive that Nebraska participated in and that within the next month they will be closing the RFP and plan to award the contract and identify a partner by the end of 2016. Regarding Nebraska's Data Collection process; 343 agencies completed the on-line survey representing 45,000 + public safety responders, with 107 representatives attending the 8 regional workshops that were held to gather local input. He said the information that was gathered through these efforts was so vital because that is the information that went into the RFP.

He talked about the types of tools and applications that will be available through FirstNet to monitor the physiological information of first responders and other safety enhancing tools.

Once a partner is selected FirstNet will be able to move forward in providing answers to the questions being asked; how much is it going to cost, where is it going to be (coverage), what applications are available and what it will mean to the responders.

The Consultation Task Teams (CTT) will be a tool to provide input from the state to FirstNet and the vendor. It is an opportunity for state subject matter experts to help provide additional information to FirstNet as the Network prepares for deployment.

Mr. Pierce said Nebraska if interested we can continue the data collection through September. It will help provide more information to the partner on the states needs.

Doug Harder then spoke and recalled the last time he was in Nebraska was in March of 2015 at the State Consultation meeting in Kearney when he was working in the State Plans Division of FirstNet. He has recently transferred to the Consultation branch as an advisor to the regional leads to help with information sharing on the state plans and outreach. Doug is based out of Boulder, CO. Doug said it is a requirement of the Act to provide each state with their State Plan so the Governors can decide if they want the State to opt in or out. He said there were four objectives/outcomes of the State Plan:

- 1. What is required by the law
- 2. Notify the state that the RFP is complete
- 3. How much money FirstNet will spend in the state out of the 7 billion dollars
- 4. The details of the RFP

Doug said these were rather vague and that they should provide more information to the states. Also included in the plan release will be the kind of information the state wants to see in the plan. They are asking the states to tell them what information they need for the Governor to make their decision and for agencies to decide if they want to be subscribers to the network. They will also provide information on what the FCC and NTIA need for comparison of a states plan to opt out if they decide to do so. This will let the states know, up front, what is required if a state opts-out.

The state plan will be delivered on-line through a portal. They expect the portal will have two sides to it. One side would be for public safety entities that would include the service plans for pricing and coverage, available devices and applications, etc. The other side would be restricted for the Governor and decision makers. It would be password protected with some areas more protected due to the proprietary nature of the information. The Governor's side would include network polices that would need to be in place and adhered to if a state was going to opt out. It would include information on interoperability; how is the RAN going to talk to the core, how will the potential different RAN vendors going to talk to each other in an opt out scenario. This side of the portal would include the technical specifications a state would be required to meet and maintain to insure interoperability with FirstNet.

The roll of the SPOC will continue to be dissemination of information, outreach and identification of key POC's. In the end if agencies are not satisfied with what FirstNet has to offer then they won't choose to buy services from FirstNet and will stay with their commercial service provider for broadband service.

If you opt in then you sign up and buy service from FirstNet and get the devices and applications you want to use. The reason for needing a new device is because most of the devices on the commercial market today don't have Band 14 chips in them.

Doug said the plan will be detailed, complex and technical. There will probably be an non-disclosure agreement (NDA) associated with accessing the Governor's side of the portal.

Doug used a motel analogy to help states address the opt-in/opt-out question. Would a state decide to build their own motel franchise with the responsibilities of building and running the motel in accordance with the franchise rules, guidelines, standards and costs or would you decide to just rent a room in the motel where the franchise is responsible for the operational activities, maintenance and costs for the motel? If FirstNet decides to make future updates then an opt-out state would be required to make the same updates with the costs being borne by the state.

When asked if this analogy made sense Gene Hand correctly observed that the state needs to fund the build if they go with an opt-out decision. Doug agreed and acknowledged that there was not a lot of money available for a state that may opt-out.

What will FirstNet do in the future? They will continue consultation with the state and stakeholders, the additional consultation with the executives, the CTTs, the conversations with the SPOCs all in preparation for the delivery of the state plan. At the same time FirstNet is focusing on what the plan will look like and preparing for negotiation with the partner once they sign the contract and the development of that state plan once that contract is awarded.

Moving forward they expect to deliver a draft state plan to Ed Toner, the SPOC, before they deliver the finalized state plan to the Governor. During that time a state will be able to review it and if there are questions or concerns the state can discuss those with FirstNet. They will see what they can do about raised concerns but acknowledge they would not likely be able to make a lot of changes that would affect the cost of the network or the timing of the deployment. The reason for that is because by the Act they will have already signed a contract with a partner so there isn't a lot they can do to address those sorts of concerns. If there are big gapping holes in the plan they want to make sure they try to address those issues. Doug said they are uncertain about how much time there will be between the release of the draft plan and delivery of the final plan to the Governor but it will not be long. They expect the draft delivery to occur sometime mid-2017.

Drew Delaney then spoke. He said that once the plan was delivered to the Governor the state would have 90 days to respond with their decision back to FirstNet; accept the plan or opt-out and conduct its own development of a radio access network. FirstNet is responsible for building the core to the network.

Matthew May asked if a state decided to opt-out if they still could use Band 14 or if that is off the table. Drew said that no matter what decision a state makes Band 14 is going to be built out across the nation and available for opt-out states.

Drew said the decision to sign up for FirstNet or not is up to the individual agencies. He walked through the post decision process, under an opt-in scenario once the 90 day period has passed FirstNet will start issuing task orders to their partner and they will begin deployment of the network based on the details articulated in a states plan. Drew said under an opt-out scenario this begins a process that is outlined in the Act that created FirstNet. The state has 180 days to select a partner develop their own plan and submit it to the FCC for review and approval. This would be an interoperability review to make sure this RAN will interoperate with the FirstNet core and RAN network. The second piece is that a state may apply to the NTIA for construction grant funds. The third piece is that a state must apply to FirstNet for a spectrum lease of the Band 14 spectrum and then along the way there is the NEPA compliance when building out the network. A key piece here is that the timelines associated with the act on the day a state submits a plan to the FCC. There are three federal government plan review processes that an opt-out state must complete and they don't know what those timelines look like. This will be a lengthy process.

Drew said that FirstNet wants to see all states succeed regardless of whether they opt-in or out and they will work to help any state as much as they can.

What information does the Governor need to consider when making the decision;

- Timeline risk how does opting out and the time delay associated with it affect first responders in the state if they are looking at an inherent 2 to 3 year delay.
- Specifics of the RAN deployment and how that affects both the current and long term budget outlook.
- Does the legislature need to approve the RFP or ability to pull together a team and long term upgrades to network.
- Can you handle the management and operation of an LTE network.
- Make sure there is a clear decision making process.

Drew was asked if a state opts-in and the buildout moves forward, who is responsible for completing the environmental documents and obtaining the approval? Tim Pierce said in an opt-in scenario FirstNet and the Partner will be responsible for the environmental requirements.

Gene Hand asked about the draft plan and if the state had issues with the plan what would happen. Tim Pierce said they would try to resolve issues but that may not be possible at that point in the process.

Tim said the Act required FirstNet was required to consult with the state on a number of topics and that they have done some of those. Two other topics are the assignment of priority to local users and then the training needs of local users. When they talk about the assignment of priority to local users that is where the Consultation Task Teams (CTT) concept came through. In the cellular LTE world there is a concept called quality of service, priority and preemption (QPP). Essentially this means if there is a line of users a decision needs to be made on who goes first and second, etc. FirstNet is seeking state stakeholders, public safety representatives and subject matter experts (SME's) who have knowledge or interest in QPP to provide FirstNet with feedback and understand how QPP should be implemented and operate when the network goes live

Tim talked about training. He asked if any of those attending today's meeting have any type of agency level training on data usage. Tom Casady indicated that his agencies do major training on data applications that they utilize. This includes phones, MDT's and more. Neil Miller indicated they also spend a great deal of training as well. Tom Casady said at least once or twice monthly they provide training.

Tim is wondering what their thoughts are on training. Is it an agency thing? Tom Casady thought agencies would do the training on applications and programs that they use. The technicians that have to make the decisions on backbone and backhaul are something different and that FirstNet will play a real important role. Stanley Shearer said that the training at Omaha Fire is specific on applications except for an occasional reconnection issue. Mostly it is regarding patient care reports, CAD, etc.

Tom Casady said he is thinking about the deployment of a COW in Nebraska due to our smaller amount of infrastructure. Tom asked if there were going to be technicians around the state that would be able to do that which was a concern he has and feels that is a place where FirstNet could play an important role.

Matthew May felt a lot of the need will be determined by how the build out of the network is. If there is a lot of permanent infrastructure in place there will be a smaller need for mobile asset training. Tom Casady didn't think they had hired anyone in the past 10 years that needed any training on a subscriber device. Tim said that is apparent with the younger responders coming out of academies as they are very familiar with mobile devices.

Neil Miller thought a lot will depend on what FirstNet brings out. If FirstNet is going to bring out a lot of devices and applications then they are going to have to figure out how to train those users on the applications that they deploy. As part of an agency signing up is FirstNet going to train the trainer or how will this be handled. It will really depend on what FirstNet brings to the table. Lynn Marshall added that the Band 14 devices will be different than what responders are currently used to and the push back from putting something new in their hands. Stanley Shearer thinks most of the training coming from FirstNet being on the infrastructure behind it for technicians. The applications developers would be responsible for the applications trainings.

Doug added that if Nebraska were to opt-in FirstNet technicians would not be responsible for maintaining or upgrading the infrastructure. That is a FirstNet problem or their partner's problem. Matthew May asked if that would apply when a COW needed to be deployed. Doug Harder said that in the RFP they asked the bidders to describe how they would address the need for deployable solutions which would include the technicians to run the equipment. There will be negotiations between FirstNet and the vender to work out the issues. Doug talked about how all the carriers have deployable assets stationed around the country and their positions vary based on the time of year and their experiences on when and where disasters tend to occur.

Tim Pierce revisited the QPP/CTT topic, FirstNet has put together good slide deck and training series

about LTE cellular technology and how quality, priority and preemption comes forward. He has sent this information to Ed and Wilhelm this week to use to prime up those who are interested in being involved and then we will come together for a regional workshop and talk about how this will play out in a real world scenario and be implemented once the network is deployed. Tim commented on how far FirstNet has progressed recently with the RFP other progress they have made. Tom Casady thanked the FirstNet people for coming to the meeting and speaking to the group.

Nebraska's Consultation Task Teams (CTT) - Wilhelm

Wilhelm said he wanted to get the Working Groups opinion on how they saw the selection of the CTT moving forward. He reminded them that at the last meeting that it was decided that he would draft the text of a letter or email that the members could send to their representing organizations which would explain the CTT and offer them the opportunity to identify someone to participate on the CTT. He has received 8 names so far. One question Wilhelm had for Tim Pierce was that he had initially asked for up to 5 representatives on these committees and since we have 8 and possibly more, will FirstNet be able to allow all of them to be participate. Tim thought they could work with that. They want to have a good conversation and dialogue and not a presentation. Wilhelm went over the list of those who are interested in attending and will send out the informational documents Tim previously referred to for those who are interested in attending. We were also asked if we wanted to do a regional workshop or have a workshop with just Nebraska. Wilhelm asked if that was still an option. Tim suggested we go through the regional workshop and then evaluate that to determine if there is a desire to have one just for Nebraska. The regional workshop would be in the May to August timeline.

Tom Casady was concerned that we are having a lot of heavy representation on the CTT by people here in Lancaster County. Wilhelm said that is always a concern and the preference is to have a broad range of representation from across the state and varying disciplines. We have made the offer asking for involvement through a ListSrv distribution system and to the agencies you all represent. Tom Casady said if we get too many he said we should feel free to reduce the number of Lancaster County representatives. Tim said they are looking to have this in S/W lowa and also access via a webinar. Stanley Shearer asked Tom Casady if he could reach out to OPD and maybe they would get involved. Tom said that they have but with little result. Matthew May said he thought too that interest may vary depending upon the topic to be discussed with future CTT's.

Comments on the APCO Broadband summit in Washington DC – Tom Casady and Matthew May

Tom said that both he and Matthew went to the conference. He said there were 200 people attended and most of them were on a higher technological level. There were two presentations by two of the Band 14 pilot states; New Mexico and New Jersey. New Mexico has a lot of similarities with Nebraska. Their population is just a little greater than Nebraska. They have the same phenomenon as us in that they only have one large metropolitan area and big geography. Tom said the New Mexico rep did a presentation on how they have used Band 14 LTE at some of their events, the largest of which is their annual balloon festival. It attracts 80,000 and they set up with one COW and 6 terrestrial sites and had

very good data communications despite the fact that virtually everyone in that group of 80,000 people were trying to post video and cell photos to Instagram and twitter. They were using Sonim PX& android cell phones that can handle Band 14. He said they had very good data communications but only deployed 64 to subscribers. Tom said he was surprised because Lincoln at that time Tom thought probably doubled that amount of broadband public safety users that were running off Verizon. Matthew said they were using an Emergency Service I P network or ESInet. They tie in the band 14 to that network. Tom said New Jersey is a different situation with much larger population that overloads commercial cell phone providers at special events. They focused on a large air show and the Papal visit. Tom said it was interesting to see what they were doing and hear of real world experiences where they were doing the things they wanted to do like streaming real time video, using applications and a lot of GIS and they were doing it without the limitations of competing with general public. Matthew said they used it heavily to communicate situational awareness, texting between officers and some secondary push to talk to free up their radio network. He said on a map they were able to tag or chip anyone or sites on the map from the command post and it would show up. If they had a lost child they would send that picture out and all the officers on the network and they would text back and forth on their response. It cut back on the time that it usually took to locate the missing.

Tom said there were several presentation s about broadband applications that were interesting but didn't see anything Lincoln wasn't already doing. Northern Kentucky did the software development on the Pulse Point application that Lincoln uses pretty effectively. Tom encouraged people in Nebraska to install Pulse Point on their phones. Another presentation by Brett Cain of Intrepid Networks demoed a situational awareness app. They talked about apps for public safety and Brett said if you have an app and you can't hand it to someone without any instruction or training or website tutoring and the employee can't pick it up and run the app, then you have made a mistake. This made Tom feel good about how they are doing things with Lincoln's public safety agencies. Tom is most concerned about broadband access when the unplanned event occurs. Another take away were the new risks for cyberattacks for PSAPS. The need to stand up Emergency Communications Cyber Security Centers to provide a higher level of security for our PSAP assets. Matthew said past focus has been on the user interface layer and everyone has a vendor for that now. From the APCO side they are trying to do this with FirstNet and NextGen but they are not focusing on the user interface side they are focusing on the secure screen side. They want the transportation layer to be the home of what is occurring and they want everything to become true SIP. Currently we are not talking apples to apples. The need to get the pipe to be same protocol which is SIP all the way through. Another take away for Matthew was that there was funding from the Stafford Act for PSAPs and 9-1-1 Center.

Tom talked about a presentation on location of assets indoors with Bluetooth devices that communicate back to a user's smartphone by using the low energy Bluetooth beacon. It can be used to locate the height of an asset(such as what floor a device is on in a multiple story building) and you can see the smart phones moving around in a building.

Julie Righter-Dove asked if they talked about how they were going to bring all of this information into the PSAPs? Matthew said they didn't. He said this is where the SIP comes in. Now that traffic is getting

blocked by the routers. You have a lot of information available but it is on a different format and some routers and other gateways can't pass the information along.

Tom and Matthew appreciated the opportunity to attend the conference. Wilhelm advised it was paid for with SLIGP grant funds.

Colorado's "Experience Public Safety Long Term Evolution (XPSLET) 2016 - Stan Shearer

Stanley said that XPSLTE essentially was a one day event set up in Brighton, CO with their Band 14 network set up with 6 vendors. You went off with the different vendor groups who were trying to show you their products. It brought out some good vendors. Sonim was there, they had drone usage, ES CHAT. They showed a very thin film that slides in the protective vest and if an officer is shot it immediately sends information from blue tooth to the phone back to the agency and it will tell you where it was penetrated at if it penetrated all the way. Mobile Hot Spots in motion which is a device both Omaha and Lincoln Fire uses, software record management systems and programs that can be used on a droid phone also provided demonstrations. He will get the list of vendors and their PPT's to Bob. Stanley said that he is hopeful to hold a FirstNet demo in Omaha next year during next year's CWS. He said CO also scheduled their state LMR radio summit the day after which he also attended.

Tom Casady said he didn't realize that a normal consumer cell phone would not work on band 14 and it made him think about how many devices that Lincoln will have to replace. Stanley said they will be buying radios in the near future and many of them they will want to order that will support LTE for command. Stanley said one of the things they will be facing in the future is how wireless and Bluetooth integrate with their air packs. So it may be to his advantage to have a wireless hotspot on a fire scene if it helps with the communication of air packs and that sort of thing. Matthew said that at the DC conference they also talked LTE5 which will gear more toward the things instead of the phones. It will be geared for machine to machine communications.

Discuss about future outreach and education activities for our Stakeholders - Wilhelm

Wilhelm talked about the SLIGP grant funds and how we have used them to fund outreach and education across the state. He wanted to get an idea of what they thought we ought to do to continue those efforts? Julie Righter-Dove brought up the APCO State conference in October 23-25 in Lincoln and that on the afternoon of the 23rd they are doing a 9-1-1 comes to Lincoln and the more we could get to that conference would be great. FirstNet should be on the panel. Neil Miller said FirstNet is on the list to participate. Tom Casady suggested that Mike Overton does a technology conference in Kearney but he gets a pretty good attendance. Stanley mentioned that FirstNet's Brett Williams is coming to the Statewide EMS conference as well.

Wilhelm said we have the funds we could hold another conference if we wanted. Matthew wondered if we could use the funds to set up demo's that would be able to present the opportunities of usage to potential end users. Tom asked if we sponsored a little 2 hour session in Omaha if we might get some

participation from OPD. Julie suggested Douglas County as well. Tom is thinking a FirstNet 101 session with some of their deputy chiefs.

Lynn Marshall said this was a good presentation and it was one that others need to see just to get a baseline. This almost needed to be the presentation before we got in to the consultation activities. He said it was good information. The challenge is getting enough people informed of the network capabilities. He thinks we may have to go back to the workshop activities. Julie thought this presentation with the information that Tom and Matt brought back on the real world applications would be good. What does FirstNet mean to use?

Neil said the other thing will be something from FirstNet in concrete about cost and coverage. Once that happens is when we will really see some movement.

Tom said bandwidth demand is going to explode (E-medicine, video streaming, etc.) with all the usage and devices there are and will be. The point will come when people will realize that public safety can't co-exist on a commercial network without priority and preemption.

Nominations and election of the next Chair and Co-Chair for the Working Group - Wilhelm

Wilhelm reported that Tom Casady and Neil Miller had offered, if the Working Group members agreed, to change roles for the next year. Neil Miller as Chair and Tom Casady as Co-Chair. Tom asked if there was a working group member willing to make the motion? That motion was made by Julie Righter-Dove and was seconded by Matthew May. There was no discussion and nominations were closed. Neil Miller said he was agreeable to this but felt next year we should bring someone in to be a new face to move forward. Voice vote passed the motion and Neil Miller and Casady were elected.

Public Comments – Casady

None offered.

Next meeting date is August 18th at 1:00 P.M. with location to be determined.

ADJOURN

Meeting adjourned 2:50 P.M.